

Remarks

This Application has been carefully reviewed in light of the Office Action mailed October 10, 2002. Claims 1-7, 10-12, 15-20, and 48 are currently pending. Applicants appreciate the Examiner's allowance of Claims 15-19 and 48 and the Examiner's indication that Claim 2 would be allowable if rewritten in independent form and that Claims 2, 5-7, 10-12, and 20 would be allowable if rewritten to overcome the rejections under 35 U.S.C. §§ 101 and 112.¹ Although Applicants believe all pending claims are allowable without amendment, Applicants have amended Claims 1-2, 5, 10, and 20 to further clarify, more particularly point out, and more distinctly claim at least some of the various patentable distinctions over the prior art previously present in Applicants' claims. None of these changes are considered narrowing or necessary for patentability. Applicants respectfully request further examination, reconsideration, and favorable action.

The Claims Are Allowable Under 35 U.S.C. § 101

The Examiner rejects Claims 5-7, 10-12, and 20 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Although Applicants disagree, Applicants have amended Claims 5, 10, and 20 to recite that the communications received at and transmitted from the computer-implemented process are received at and transmitted from the computer system on which the computer-implemented process executes -- undeniably involving manipulation by apparatus. Applicants respectfully request reconsideration and allowance of Claims 5-7, 10-12, and 20.

The Claims are Allowable Under 35 U.S.C. § 112

The Examiner rejects Claims 1-4 Under 35 U.S.C. § 112, second paragraph, as being indefinite. Although Applicants disagree, Applicants have amended Claim 1 to recite that the

¹ Although the Examiner indicated that Claims 1-4 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112 (Office Action, Page 4), the Examiner also rejected Claims 1 and 3-4 under 35 U.S.C. § 102(b). Thus, Applicants have assumed the Examiner's indication that Claims 1 and 3-4 would be allowable was inadvertent. If this assumption is incorrect, Applicants respectfully request clarification.

Although the Examiner indicated that Claims 2 and 18-19 would be allowable if rewritten in independent form (Office Action, Page 5), the Examiner also rejected Claim 2 under 35 U.S.C. § 112 (Office Action, Page 3) and allowed Claims 18-19 and Claim 15 on which Claims 18-19 depend (Office Action, Page 4). Thus, in light of the stated basis for the 35 U.S.C. § 112 rejections, Applicants have assumed that the Examiner intended to indicate that Claim 2 would be allowable subject only to being rewritten in independent form and intended to indicate that Claims 18-19 are allowable in their present form without being rewritten. If these assumptions are incorrect, Applicants respectfully request clarification.

computer-implemented process is operable to manage a distributed workflow "to perform a set of predefined functions" and that the computer-implemented process is operable to "manage the workflow by automatically interacting with the workflow at each of the distributed nodes to perform the predefined functions." Applicants respectfully request reconsideration and allowance of Claims 1-4.

The Claims are Allowable Over *Flores*

The Examiner rejects Claims 1 and 3-4 under 35 U.S.C. § 102(b) as being anticipated by *Flores*. Appellants respectfully submit that *Flores* does not disclose, teach, or suggest limitations recited in these claims.

A. Standard

A prior art reference anticipates a claim "only if *each and every element* as set forth in the claim is found, either expressly or inherently described," in that reference. *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987) (emphasis added); *see also* M.P.E.P. § 2131 (quoting *Verdegaal Bros.*, 814 F.2d at 631); *see also* M.P.E.P. § 706.02 ("[F]or anticipation under 35 U.S.C. § 102, the reference must teach *every aspect* of the claimed invention either explicitly or impliedly."). In addition, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989); *see also* M.P.E.P. § 2131 (quoting *Richardson*, 868 F.2d at 1236).

B. *Flores*

Flores discloses a workflow analyst that is a component of a complete workflow system allowing a user to create workflow maps of business processes. (Column 3, Lines 18-21). A business process consists of a sequence of basic transactions called workflows. (Column 1, Lines 19-21). In particular, *Flores* defines a business process as a network of workflows linked together that represent the recurrent process by which an organization performs and completes work, delivers products and services, and satisfies customers. (Column 5, Lines 55-59). Maps of these business processes highlight various features of business processes (Column 2, Lines 9-19) and enable analysts to identify opportunities for improvement. (Column 2, Lines 20-21).

Software used to implement the workflow analyst disclosed in *Flores* is based on a Model-View-Controller, object-oriented programming paradigm that includes a number of model classes. (Column 14, Lines 33-36; Column 16, Line 1 to Column 19, Line 47). One such model class, WfConditionalLink, includes description text and documents conditional links between workflows. (Column 18, Lines 30-32). Another, WfLink, models logical links between workflows and conditional links, including link types, triggers, and triggered actions in source and target workflows. (Column 18, Lines 46-51). The data stored in these and other model classes is used for drawing workflow maps of business processes and their components. (Column 14, Lines 52-54; Column 15, Lines 57-60).

According to *Flores*, every workflow has a customer role—the person for whom work is done—and a performer role—the person responsible for completing the work and declaring when the work is done. (Column 1, Lines 21-33). For example, in the sentence, “John asked Frank to prepare the report and deliver it by noon on Friday,” John is the customer for the workflow and Frank is the performer. (Column 1, Lines 40-47). As another example, in the sentence, “John proposed to prepare the report and deliver it by noon on Friday for Frank,” John is the performer for the workflow and Frank is the customer. (Column 1, Lines 48-55). A workflow can also have observers. (Column 1, Lines 24-25). An observer is defined as a person who cannot perform acts in a workflow, but is informed of acts in the workflow and has access to information associated with the workflow. (Column 1, Lines 56-57; Column 6, Lines 34-38; Column 8, Lines 1-5). Such persons typically observe for management or training purposes. (Column 1, Lines 56-57).

Within a business process map, workflows are displayed as loops. (Column 1, Line 63; Column 3, Lines 25-28; Figures 1a-1f; Figure 2). Such maps display relevant information regarding each workflow, including the customer, performer, and conditions of satisfaction, (Column 1, Lines 63-66; Figures 1a-1f; Figure 2) as well as relationships among the workflows called links. (Column 2, Lines 1-2; Figure 2). A link, according to *Flores*, is a defined dependency between two workflows and a mechanism by which dependencies between workflows are established (Column 6, Lines 22-25) and is graphically represented within a business process map as a line with an arrowhead connecting two workflows. (Column 8, Lines 57-58). A link specifies a relationship between two workflows in which an action in one workflow causes an action in another (Column 8, Lines 42-44) and contains

definitions of trigger conditions and resulting actions. (Column 8, Lines 46-47). In a loan approval business process, as explained in *Flores*, the workflow in which the loan is approved is linked to the workflow in which the bank issues a check. (Column 2, Lines 2-5). If the loan is approved, a secondary, "write check" workflow is triggered, otherwise the "write check" workflow is not triggered. (Column 2, Lines 5-8).

According to *Flores*, a workflow server is the heart of a workflow system. (Column 4, Line 22). Workflow operations are concentrated in the workflow server, rather than in end-user applications. (Column 4, Lines 22-24). The workflow server includes a transaction manager, a workflow processor, a workflow updater, a workflow language interpreter, and an agent manager. (Column 4, Lines 30-32). The workflow server uses a transactions database, which contains a history of completed workflows and workflows in progress for use in determining new workflow states and available actions, (Column 4, Lines 33-34; Column 4, Lines 58-61) and a names/routing database. (Column 4, Lines 33-34). Workflow-enabled applications interface with the workflow server via the transactions database of the workflow server, APIs, or messaging, database, or inter-process communications. (Column 5, Lines 9-13). According to *Flores*, this client-server design allows workflow logic and overhead functionality to be handled at the workflow server, eliminating the need for applications to include intelligence about workflows as part of their design. (Column 4, Lines 25-30).

C. *Claim 1*

Claim 1, as amended, recites:

A computer-implemented process operable, when executing on a computer system, to manage a distributed workflow to perform a set of predefined functions:

the computer-implemented process operable, when executing on a computer system, to store a set of predefined functions for a workflow that are to be performed at a plurality of distributed nodes; and

the computer-implemented process operable, when executing on a computer system, to manage the workflow by automatically interacting with the workflow at each of the distributed nodes to perform the predefined functions.

Flores provides no disclosure, teaching, or suggestion of a computer-implemented process that manages or interacts with a workflow. *Flores* instead discloses model classes that are part of an object-oriented programming paradigm on which workflow analyst software is based. (Column 14, Lines 33-36; Column 16, Line 1 to Column 19, Line 47).

Some of these classes contain information regarding links between workflows, including triggering actions and triggered actions in source and target workflows, but *Flores* clearly states that the data stored in these classes is used simply for drawing workflow maps of business processes and their components. (Column 14, Lines 52-54; Column 15, Lines 57-60). *Flores* therefore fails to disclose, teach, or suggest a “computer-implemented process” that, “when executing on a computer system,” “manage[s] a distributed workflow to perform a set of predefined functions” and “manages the workflow by interacting with the workflow at each of the distributed nodes to perform the predefined functions,” as recited in independent Claim 1, as amended.

For at least these reasons, *Flores* fails to disclose, teach, or suggest all elements of Claim 1, as amended. Claim 1 is therefore allowable over *Flores*.

D. Claim 3

Claim 3 depends on Claim 1 and is allowable for at least this reason.

In addition, Claim 3 recites, “The process of Claim 1, wherein the set of predefined functions are operable to transmit data associated with operation of the workflow at each of the distributed nodes to a monitoring system.” *Flores* provides no disclosure, teaching, or suggestion of operation of a workflow at a plurality of distributed nodes. *Flores* discloses a workflow-enabled application interfacing to a workflow server via a transactions database of a workflow server, APIs, or messaging, database, or inter-process communications, (Column 5, Lines 9-13) but nowhere does *Flores* disclose, teach, or suggest that these applications participate in the disclosed workflows. In fact, *Flores* teaches away from this possibility. First, *Flores* discloses that only persons take action in workflows. (Column 1, Lines 19-33). Second, *Flores* discloses that workflow operations are concentrated in a workflow server and not in end-user applications. (Column 4, Lines 22-24). According to *Flores*, such a client-server design allows workflow logic and overhead functionality to be handled at the workflow server, eliminating the need for applications to include intelligence about workflows as part of their design. (Column 4, Lines 25-30). Even assuming for the sake of argument that the workflow-enabled applications disclosed in *Flores* could properly be viewed as “distributed nodes,” *Flores* would still fail to disclose, teach, or suggest “operation of the workflow” at distributed nodes, as recited in Claim 3.

Moreover, *Flores* provides no disclosure, teaching, or suggestion of a set of predefined functions transmitting data associated with the operation of a workflow to a monitoring system. *Flores* discloses persons monitoring workflows. (Column 8, Lines 1-5). However, even assuming for the sake of argument that such a person could be properly viewed as a “monitoring system,” *Flores* would still fail to disclose, teach, or suggest “data associated with operation of the workflow at each of [a plurality of] distributed nodes” being transmitted by “predefined functions” to a monitoring system, as recited in Claim 3.

For at least these reasons, *Flores* fails to disclose, teach, or suggest all elements of Claim 3. Claim 3 is therefore allowable over *Flores*.

E. Claim 4

Claim 4 depends on Claim 1 and is allowable for at least this reason.

In addition, Claim 4 recites, “The process of Claim 1, wherein the set of predefined functions are operable to deploy the workflow to the distributed nodes.” *Flores* provides no disclosure, teaching, or suggestion of a set of predefined functions deploying a workflow to a plurality of distributed nodes. As discussed above, *Flores* instead discloses actions taken by a person in one workflow initiating other workflows. (Column 1, Lines 26-33; Column 2, Lines 2-8; Column 8, Lines 42-45). *Flores* also discloses one person requesting another person to perform work and the other person undertaking to perform the work. (Column 1, Lines 26-33). However, even assuming for the sake of argument that initiating a workflow or one person requesting another person to perform work could be properly viewed as “deploy[ing a] workflow,” *Flores* would still fail to disclose, teach, or suggest a “set of predefined functions” deploying a workflow, as recited in Claim 4.

For at least these reasons, *Flores* fails to disclose, teach, or suggest all elements of Claim 4. Claim 4 is therefore allowable over *Flores*.

Allowed and Allowable Subject Matter

Applicants appreciate the Examiner’s allowance of Claims 15-19 and 48 and the Examiner’s indication that Claims 2, 5-7, 10-12, and 20 would be allowable if rewritten to

overcome the 35 U.S.C. §§ 101 and 112 rejections.² As discussed above, Applicants believe the 35 U.S.C. §§ 101 and 112 rejections have been addressed and that the Claims are allowable under 35 U.S.C. §§ 101 and 112. In addition, although applicants disagree that it is necessary, Applicants have rewritten Claim 2 in independent form and Claim 2 is allowable. Applicants respectfully request reconsideration and allowance of at least Claims 2, 5-7, 10-12, 15-20, and 48.

Pursuant to 37 C.F.R. § 1.104, Applicants respectfully issue a statement commenting on the Examiner's reasons for allowance. Applicants respectfully disagree with the Examiner's reasons for allowance to the extent that they are inconsistent with applicable case law, statutes, and regulations. Furthermore, Applicants do not admit to any characterization or limitation of the claims, particularly any that are inconsistent with the language of the claims considered in their entirety and including all of their constituent limitations, or to any characterization of a reference by the Examiner.

² Although the Examiner indicated that Claims 1-4 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112 (Office Action, Page 4), the Examiner also rejected Claims 1 and 3-4 under 35 U.S.C. § 102(b). Thus, Applicants have assumed the Examiner's indication that Claims 1 and 3-4 would be allowable was inadvertent. If this assumption is incorrect, Applicants respectfully request clarification.

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Conclusion

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request further examination and full allowance of all pending claims.

If the Examiner believes that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to call Christopher W. Kennerly, attorney for Applicants, at 214.953.6812.

Although Applicants believe no fee is due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,
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Appendix A
Mark-Ups Reflecting Changes to Claims

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1. (Amended) A computer-implemented process operable, when executing on a computer system, to manage a distributed workflow to perform a set of predefined functions:

the computer-implemented process operable, when executing on a computer system, to store a set of predefined functions for a workflow that are to be performed at a plurality of distributed nodes; and

the computer-implemented process operable, when executing on a computer system, to manage the workflow by automatically interacting with the workflow at each of the distributed nodes to perform the predefined functions.

2. (Amended) [The process of Claim 1, wherein] A computer-implemented process operable, when executing on a computer system, to manage a distributed workflow to perform a set of predefined functions:

the computer-implemented process operable, when executing on a computer system, to store a set of predefined functions for a workflow that are to be performed at a plurality of distributed nodes;

the computer-implemented process operable, when executing on a computer system, to manage the workflow by automatically interacting with the workflow at each of the distributed nodes to perform the predefined functions; and

the set of predefined functions [are] operable to generate a workflow between a plurality of enterprises.

5. (Amended) A computer-implemented process for generating a collaboration between a plurality of enterprises, the computer-implemented process operating at least in part external to the enterprises, the computer-implemented process operable, when executing on a computer system, to:

receive at the computer system a preliminary collaboration from a first enterprise;
automatically transmit the preliminary collaboration from the computer-implemented process at the computer system to a predefined second enterprise for review;

receive at the computer system a response to the preliminary collaboration from the second enterprise;

automatically transmit the response of the second enterprise from the computer-implemented process at the computer system to the first enterprise for review; and

receive at the computer system a response to the response of the second enterprise from the first enterprise, the responses of the first and second enterprises ultimately resulting in a final collaboration based on the preliminary collaboration and optimized for the first and second enterprises.

10. (Amended) The process of Claim 5, further operable, when executing on a computer system, to;

receive at the computer system an approval from each of the first and second enterprises for a collaboration based on the preliminary collaboration and reflecting the responses of the first and second enterprises;

subsequent to receiving at the computer system the approvals from the first and second enterprises, automatically transmit the collaboration from the computer-implemented process at the computer system to a predefined third enterprise for review;

receive at the computer system a response to the collaboration from the third enterprise;

automatically transmit the response of the third enterprise from the computer-implemented process at the computer system to the first and second enterprises for review; and

receive at the computer system responses to the response of the third enterprise from the first and second enterprises, the responses of the first, second, and third enterprises ultimately resulting in a final collaboration based on the preliminary collaboration and optimized for the first, second, and third enterprises.

20. (Amended) A computer-implemented process for monitoring a collaboration across a plurality of enterprises, the computer-implemented process operating at least in part external to the enterprises, the computer-implemented process operable, when executing on a computer system, to:

receive at the computer system a first predefined set of data associated with operation of a first portion of the collaboration at a first node of a first enterprise, the first set of data having been collected in response to an automatic query of the first node for the first set of data;

automatically transmit the first set of data from the computer-implemented process at the computer system to a monitoring system in response to the querying of the first node;

receive at the computer system a second predefined set of data associated with operation of a second portion of the collaboration at a second node of a second enterprise, the second set of data having been collected in response to an automatic query of the second node for the second set of data; and

automatically transmit the second set of data from the computer-implemented process at the computer system to the monitoring system in response to the querying of the second node.